### Powder Valley Nature Center

#### HIKES • All hikes are 1 hour long and outdoors



Budding Biologists Hike September 12–October 12, 2012 and April 3–May 17, 2013

What do Biologists study? Discover the great outdoors and learn to distinguish between living and non-living things. Using tools of inquiry, work as field scientists to examine the forest floor.

#### All Grades:

Seasonal Hikes September 12–December 14, 2012 and February 6–May 17, 2013

Discover the seasons and what's happening in the forest through observations and hands-on outdoor activities. Each hike is unique as students observe the natural changes occurring throughout the year.

### LARGE GROUP PROGRAM OPTIONS • All grades ALL PROGRAMS OFFERED WEDNESDAYS THROUGH FRIDAYS

| Double   | Triple  | Quadruple   |
|--|---|---|
| Group Size: Pre K–K: 21–40 students; 1st–12th: 26–50 students.     | Group Size Pre K–K: 41–60 students; 1st–12th: 51–75 students.       | Group Size Pre K–K: 61–80 students; 1st–12th: 76–100 students.      |
| Minimum time scheduled:<br>Pre K–K: 1½ hours;<br>1st–12th: 2 hours | Minimum time scheduled: 2½ hours Includes one teacher led rotation. | Minimum time scheduled: 3 hours Includes two teacher led rotations. |

Missourians care about conserving forest, fish and wildlife!

Powder Valley Conservation Nature Center 11715 Cragwold Rd. St. Louis, MO 63122



ST. LOUIS REGION

## Powder Valley Nature Center

Missouri Department of Conservation • School Year 2012-2013



#### Reservations Begin Wednesday, August 8, 2012

Call (314) 301–1500 Classes fill up quickly so please call early to reserve your date.

Programs are offered September 12, 2012 through May 17, 2013 (No programs are offered in January.)



We help People Discover Nature!

## Powder Valley Nature Center

Pre K - 2nd Grade



Programs are 1  $\frac{1}{2}$  hours for Pre K and K levels and 2 hours for 1st and 2nd grades. Both include indoor and outdoor components. We suggest one adult chaperone per four students.

#### **Bird Buddies**

Pre K–K September 12–December 14, 2012 and February 6–May 17, 2013

Explore the characteristics of birds through hands-on activity and mimicry. Go on a bird hike and make a pair of binoculars to take home.

#### I Like to Move It, Move It!

Pre K-K

September 12–December 14, 2012 and February 6–May 17, 2013

Take a close look at animal movement and behavior. Learn how animals use different parts of their body to function and survive in the wild. Dramatic play, live animals, and a hike will be a part of this "moving" experience!

#### Feeling Froggy!

Pre K–K September 12–October 12, 2012 and April 3–May 17, 2013

How do frogs grow? How are they different from other animals? Discover the answers to these questions through mimicry, live animals, and a pond study.

### Furry, Feathered, Scaly, or Smooth?

Pre K–2nd Grade September 12–December 14, 2012 and February 6–May 17, 2013

Want to learn what animals feel like and how their outer layer keeps them protected? We've got you covered! Warm up to the world of animal coverings and the special adaptations that help them to survive in their environments.

#### **Insect Inspectors**

Pre K–2nd Grade September 12–October 12, 2012 and April 3–May 17, 2013

Did that critter have six legs or eight? Was it a spider or an insect? Catch and observe all kinds of insects living right under your nose and in the water.

#### Let's Pollinate!

Pre K–2nd Grade September 12–October 12, 2012 and April 3–May 17, 2013

Flowers can't walk, so how do they spread to different places? Pollinators! Learn about the stages of plant growth and some of the pollinators that make it happen.

#### **Mammalogy for Minis**

Pre K–2nd Grade September 12–December 14, 2012 and February 6–May 17, 2013

Walk in the tracks of a deer.... burrow like a mole! Become a different mammal by observing and behaving like several Missouri mammals. Explore mammal traits and hike to find some furry residents of Powder Valley.

#### **Get a Life Cycle!**

1st–2nd Grade September 12–October 12, 2012 and April 3–May 17, 2013

How do life cycles differ within the animal world? Explore metamorphosis and growth through the fascinating lives of insects, amphibians, and birds. Outdoors, search for animals in different life stages.



9<sup>th</sup>–12<sup>th</sup> Grade Programs available upon request.

### Powder Valley Nature Center

3rd - 5th Grade and 6th - 8th Grade



3rd-5th Grade

Aquatic Ecology

April 3-May 17, 2013

What critter is that? It's swimming in circles! Practice the basics of aquatic collection techniques along with the investigation of live organisms. View macroinvertebrates indoors then head outdoors to collect and identify specimens before returning them to the water.

# Arthropod Investigators September 12–October 12, 2012 and April 3–May 17, 2013

Did you know that all insects are arthropods, but not all arthropods are insects? We'll introduce animal taxonomy as we investigate each arthropod class. Learn about the special adaptations of arthropods and how to identify them by using a simple dichotomous key.

#### **Avian Adaptations**

September 12–December 14, 2012 and February 6–May 17, 2013

It's a bird! It's a plane! No, it's a bird! Learn to identify birds by specific physical and behavioral characteristics. Indoor hands-on activities illustrate adaptations of beaks, feet, and wings. Outdoors, practice your observation skills while learning how to use a field guide.

#### **Creatures of Habitat**

September 12–Dec 14, 2012 and Feb 6–May 17, 2013

A habitat provides food, water, shelter, and space for the animals living there. It sounds nice and easy, but life in the wild is tough. Learn how animals use their diverse adaptations to survive in a habitat. Come prepared to explore the forest and pond habitats of Powder Valley.

### Predator—Prey: What makes Them That Way?

September 12–October 12, 2012 and April 3–May 17, 2013

Every animal species has its own way of finding its dinner. Some do this while they also avoid being dinner for someone else. Discover various adaptations which determine how and on whom different animals dine.

6th-8th Grade

#### **Forest Explorations**

September 12–October 12, 2012 and April 3–May 17, 2013

What do forests mean to you.... or to wildlife? Discover the in's and out's of trees, how they work together to form an ecosystem and how to identify several common MO trees. Test observation and judgment skills to determine the health of Powder Valley's trees using the MO Forestkeeper's tree observation methods.

#### Behavior Biologists Limited to Single or Double Groups

(This programs is 2 ½ hours) September 12–December 14, 2012 and February 6–May 17, 2013

Gain first-hand experience to all steps of the Scientific Method! Jump into the shoes of a Research Biologist to study birds of prey and their menu of critters. Conduct an animal behavior study to see how wildlife responds to those hungry predators of the sky.

### Pond and Stream Ecology

April 3-May 17, 2013

Limnology is the study of lakes, ponds, and rivers. Become a limnologist as you assess and compare the health of a pond and a stream through macro-invertebrate sampling and water testing. The majority of this program will be conducted

